

Listing of The Claims:

1. (Currently amended) A method for indexing a database comprising:

~~An indexing technique for~~ associating a plurality of keys with a plurality of respective predetermined records in the database, wherein each key comprises a data string of one or more digits;

~~each of said keys comprising a data string of one or more digits with a plurality of constituent elements each corresponding to a respective one of said digits,~~

associating each digit in the data string with a level as a function of the position of the digit in the data string;

obtaining an instruction at a first level, wherein the instruction is associated with one or more records in the database; and

checking for another instruction at a second level, wherein the another instruction is associated with one or more records in the database; and if the another instruction is absent from the second level, returning to the first level and indexing the data string in accordance with the instruction at the first level.

~~said indexing technique comprising plural levels, each of which represents one of said digits and having an instruction for each said constituent element of said data strings at said represented digit, wherein at least one said instruction includes specifying one or more records and also moving on to check a next level, wherein at least one telephone call is routed to a destination based on said indexing technique.~~

2. (Currently amended) The indexing ~~technique~~ method of claim 1 wherein each of said keys represents a group of telephone numbers.

3. (Currently amended) The indexing ~~technique~~ method of claim 2 wherein each of said keys is a specified portion of each telephone number of said group.

4. (Original) The indexing ~~technique~~ method of claim 3 wherein said specified portion is a starting portion of said each telephone number of said group.
5. (Currently amended) The indexing ~~technique~~ method of claim 4 wherein said starting portion comprises one or more digits.
6. (Currently amended) The indexing ~~technique~~ method of claim 2 wherein said records are call processing instructions.
7. (Currently amended) The indexing ~~technique~~ method of claim 6 wherein said call processing instructions are routing instructions.
8. (Currently amended) The indexing ~~technique~~ method of claim 1 wherein said constituent elements are alphanumeric characters.
9. (Currently amended) The indexing ~~technique~~ method of claim 8 wherein each of said keys represents a group of data entries of said database.
10. (Currently amended) The indexing ~~technique~~ method of claim 9 wherein each of said records is a destination assigned to said group represented by said each key.
11. (Currently amended) The indexing ~~technique~~ method of claim 1 wherein a sequence of said plural levels corresponds to a sequence of said digits in said data strings.
12. (Currently amended) The indexing ~~technique~~ method of claim 11 wherein said sequence of the digits is a natural order of the digits in the data string.

13. (Currently amended) The indexing ~~technique~~ method of claim 12 wherein a first level represents a first digit, a second level represents a second digit, a third level represents a third digit, and so forth.

14. (Original) The indexing ~~technique~~ method of claim 11 wherein said sequence of the digits is determined by a specified priority of each digit in the data string.

15. (Currently amended) The indexing ~~technique~~ method of claim 14 wherein a first level represents a digit of a highest priority, a second level represents a digit of a second[[ly]] highest priority, a third level represents a digit of a third[[ly]] highest priority, and so forth.

16. (Previously presented) A method of looking up records for a data string query in a database indexed according to the indexing technique of claim 1, said database including said plural levels, said data string query comprising a string of constituent elements, each said element corresponding to a respective one of said digits, said method comprising the steps of:

starting at a first level of said database;

checking for an instruction for each said constituent element of said data string query at each digit represented by each said level and moving on to check a next level until an instruction found at a last checked level does not include a sub-instruction to check a next level; and

if said instruction found at said last checked level specifies one or more records, returning said specified records to said data string query, otherwise backing up one level at a time until an instruction specifying one or more records is found, and returning said specified one or more records to said data string query.

17. (Original) The method of claim 16 wherein said data string query is a telephone number.

18. (Original) The method of claim 17 wherein said records are call processing instructions.

19. (Original) The method of claim 18 wherein said call processing instructions are routing instructions to route a call associated with said telephone number.
20. (Original) The method of claim 19 wherein said levels are checked in a sequence corresponding to a sequence of said digits in said data string query.
21. (Original) The method of claim 20 wherein said sequence of the digits is a natural order of the digits in the data string query.
22. (Original) The method of claim 20 wherein said sequence of the digits is determined by a specified priority of each digit in the data string query.
23. (Original) The method of claim 16 wherein said constituent elements of the data string query are alphanumeric characters.
24. (Original) The method of claim 16 implemented as a recursive algorithm computer program.
25. (Previously presented) A method of looking up records for a data string query in a database index, said data string query comprising a string of constituent elements each taking one digit in the string, said method comprising the steps of:
 - starting at a first level of a multilevel data structure;
 - checking for an instruction for each said constituent element of said data string at each digit represented by each level and moving on to check a next level until an instruction found at a last checked level does not include a sub-instruction to check a next level; and
 - if said instruction found at said last checked level specifies one or more records, returning said specified one or more records to said data string query, otherwise backing up one level at a time until a level with records to be returned is found; and

returning all routing records encountered in all levels in either an order encountered or in reverse order.

26. (Original) The method of claim 25 implemented as a recursive algorithm.